



WHAT IS CLAIMED IS:

An isolated or purified nucleic acid molecule comprising a nucleotide sequence encoding CaEss1, or having at least 70% homology thereto.

- 2. The isolated or purified nucleic acid molecule of claim 1 comprising the nucleotide sequence set forth in Figure 1 (SEQ ID NO:1), or at least 70% homology thereto.
- 3. An isolated or purified polypeptide comprising an amino acid sequence having the enzymatic activity of CaEss1, or at least 70% homology thereto.

4. The isolated or purified polypeptide of claim 3 comprising the amino acid sequence set forth in Figure 1 (SEQ ID NO:2).

A primer or probe which specifically hybridizes to the nucleic acid molecule of claim 1 or 2.

6. The primer or probe of claim 5 comprising OW-216 or OW-221 (SEQ ID NOS: 3, 6).

- 7. A method for detecting Candida albicans in a sample comprising detecting the presence therein of a nucleic acid molecule of claim 1 or 2.
- 8. A method for detecting Candida albicans in a sample comprising detecting the presence therein of a polypeptide of claim 3 or 4 or of an antibody which binds to such a polypeptide.
 - 9. An antibody which binds to the polypeptide of claim 3 or 4.
 - 10. A diagnostic composition comprising the polypeptide of claim 9.
 - 11. A diagnostic composition comprising the nucleic acid molecule of claim 1 or 2.

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- A diagnostic composition comprising the primer or probe of claim 5. 12.
- A diagnostic composition comprising the primer or probe of claim 6. 13.
- A compound which inhibits Canflida albicans by inhibiting CaEss1 or 14. CaESS1.
- 15. The compound of claim 14 comprising an antibody which binds to CaEss1.
- The compound of claim/14 which selectively inhibits growth of yeast 16. transformed to contain and express CaESS1 and/or PIN1 and not an endogenous ESS1, when CaESS1 is expressed but not when PIN1 is expressed.
- An antiproliferative compound which selectively inhibits growth of 17. yeast transformed to contain and express PIN1 and not an endogenous ESS1, and this inhibition can be overcome by high levels of PIN1 expression.
- 18. A method for preventing or treating Candida albicans comprising administering a compound as claimed in any of claims 14, 15 or 16.
- 19. A method for preventing human cell growth comprising administering a compound as claimed in claim 17.
- A vector comprising the nucleic acid molecule of claim 1 or 2. 20.
- A method for preparing CaEs 1 comprising transforming a vector to 21. 20 contain the isolated hucleic acid molecule of claim 1 or 2 and obtaining expression thereof.
 - 22. The method of claim 21 wherein the vector is a yeast.
 - A method for obtaining an isolated nucleic acid molecule encoding 23. CaEss1 comprising performing a polymerase chain reaction on a

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sample suspected to contain *CaESS1* using primers or probes which specifically hybridize thereto.

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